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PATENT

Docket No. 160383.9023

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Eray

Appl. No.: --

Filed: May 1, 2001

For: MULTIBAND SHORT RANGE RADIO RECEIVER
FOR MOTOR VEHICLE DATA

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please enter the following preliminary amendment in the patent application transmitted herewith.

Amendment

IN THE TITLE:

Please add the title: --MULTIBAND SHORT RANGE RADIO RECEIVER FOR MOTOR VEHICLE DATA--.

IN THE SPECIFICATION:

Please delete the first eight paragraphs, and replace with the following eight paragraphs, including headings:

TECHNICAL FIELD

The invention relates to short range radio receivers installed in motor vehicles to receive data such as, for example remote control signals for locking and unlocking the doors.

BACKGROUND ART

Conventional receivers for such remote control signals operate in a single frequency band, around 434 MHz in France and 315 MHz in the USA and Japan.

By reason of this uniqueness of band within a specific country, there is often interference between the portable remote control transmitters of vehicles parked on the same car park.

On the other hand, on a worldwide level, the manufacturers of these receivers must design them according to the requests of the motor vehicle manufacturers, i.e. in limited production runs which are more expensive. It will also be noted that another frequency band, around 868 MHz, is now permitted in Europe.

The Applicant desires therefore to provide a multi-band universal receiver able to adapt to transmissions from transmitters of various frequency bands.

SUMMARY OF THE INVENTION

To this end, the invention relates to a short range radio receiver for motor vehicle data, comprising antenna means connected to a unit for processing a received carrier in a specific band of frequencies which is modulated by a data signal, the unit comprising means for frequency transposition of the carrier, which are connected to means for demodulating the transposed carrier, which are arranged to supply the demodulated data, characterized in that the antenna means are arranged to receive a plurality of frequency bands, and that frequency discrimination means are provided, connected to the antenna means, arranged to determine respective reception levels within the bands in order to compare them with each other and to control the frequency transposing means depending on the result of the comparison.

Therefore, since the receiver is able to receive signals in only one of its bands, the band which has the most energy is the useful band in practice.

BRIEF DESCRIPTION OF THE DRAWING

The invention will be better understood with the aid of the following description of a preferred embodiment of the receiver of the invention with reference to Fig. 1 which schematically shows the circuits thereof.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Remarks

A title has been added. The specification has been amended to insert proper headings. Fig. 1 has been identified in the specification and one verb tense has been corrected in the fifth paragraph, line 1. A markup showing the changes is appended hereto. Acceptance of this amendment is respectfully requested.

Respectfully submitted,

By:



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The invention will be better understood with the aid of the following description of a preferred embodiment of the receiver of the invention with reference to Fig. 1 the ~~attached single figure~~ which schematically shows the circuits thereof.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT